[CLAIM]

What is claimed is,

1. An evaluation process of a reactivity of a silica glass with silicon melt, the process comprising;

melting a little amount of silicon on the test piece of the silica glass in a vacuum furnace, and

measuring a vibration cycle of the silicon melt.

2. The evaluation process of Claim 1, the process comprising;

adjusting an inside of the vacuum furnace to an argon pressure of from 5 to 100 torr and a temperature of from 1450 to 1600 degree C,

melting a little amount of silicon on the piece of the silica glass, and

measuring the vibration cycle of the silicon melt.

3. An evaluation process of a vibration at a surface of a silicon melt held in a silica glass crucible, the process comprising;

setting in the vacuum furnace, the test piece of the silica glass cut out from a silica glass crucible, on which a little amount of silicon is put,

melting the little amount of silicon on said test piece of the silica glass, and

measuring the vibration cycle of the silicon melt.

4. The evaluation process of Claim 3, the process comprising;

adjusting an inside of the vacuum furnace to an argon pressure of from 5 to 100 torr and a temperature of from 1450 to 1600 degree C,

melting a little amount of silicon on the test piece of the silica glass, and measuring the vibration cycle of the silicon melt.

5. A silica glass crucible for pulling a silicon single crystal, wherein an inner surface of a side wall comprises the silica glass not vibrating or vibrating in the vibration cycle more than 1 / 6 seconds in the evaluation process according to Claim 4.

6. A silica glass crucible for pulling a silicon single crystal, wherein an inner surface of the side wall comprises the silica glass not vibrating or vibrating in the vibration cycle more than 1 / 6 seconds and the inner surface of a bottom comprises the silica glass vibrating in the vibration cycle less than 1 / 6 seconds, in the evaluation process according to Claim 4.

7. A process for preparing a silicon single crystal by Czochralsky method, the process comprising;

loading polycrystalline silicon into a silica glass crucible, wherein an inner surface of the side wall comprises the silica glass not vibrating or vibrating in the vibration cycle more than 1 / 6 seconds in the evaluation process according to Claim 4,

melting the polycrystalline silicon within the silica glass crucible

and

pulling up a silicon single crystal from the obtained silicon melt by using a single-crystal seed.

8. A process for preparing a silicon single crystal by Czochralsky method, the process comprising;

loading polycrystalline silicon into a silica glass crucible, wherein an inner surface of the side wall comprises the silica glass not vibrating or vibrating in the vibration cycle more than 1 / 6 seconds, and an inner surface of the bottom comprises the silica glass vibrating in the vibration cycle less than 1 / 6 seconds, in the evaluation process according to Claim 4,

melting the polycrystalline silicon within the silica glass crucible

and

pulling up a silicon single crystal from the obtained silicon melt by using a single-crystal seed.